

REMARKS

Favorable reconsideration and allowance of this application are requested.

1. Discussion of Amendments

By way of the amendment instructions above, the claims have been amended so as to clarify the same and to emphasize certain attributes of the present invention. Specifically, the amended version of claim 1 above includes the subject matter of prior claims 2 and 3 which have in turn been canceled as redundant.

The amendments made to the claims are also believed to address the Examiner's objection and rejection under 35 USC §112. As to the latter rejection, a corresponding revision has been made to the specification.

Claims 1 and 4-37 will therefore remain pending herein following entry of this amendment.

2. Response to 35 USC §103(a) Rejections

The only issue remaining to be resolved in this application is the rejection of prior claims 2-3 and 19 under 35 USC §103(a) based on Horne (USP 5611870) in view of Streetman (USP 6372979).¹ Applicant respectfully disagrees.

Horne discloses in Figures 39 and 40 a gas-fired regenerative thermophotovoltaic converter 188 including a cell module 190 formed by a cylindrical element surrounding a cylindrical IR emitter 220 (see the portion of the specification on column 11, lines 31 to 64). This embodiment of Horne fails to disclose a combustion chamber having a substantially spherical shape, a conversion chamber having a semi-ellipsoidal shape, the combustion chamber positioned in correspondence with a focus of

the ellipsoid, means for the conversion of radiant energy into electrical energy positioned on a planar surface perpendicular to the greater axis of the ellipsoid and passing through the centre of the ellipsoid.

Figure 43 of Horne discloses another embodiment wherein a beamed electro-optic IR power source 230 is converted to a beam of mid-infrared radiant energy (see column 14, lines 10-38). This embodiment fails to disclose a combustion chamber having a substantially spherical shape, means for supplying combustion support substance into the combustion chamber, means for the removal of gaseous combustion product, means for igniting the combustion reaction, an injection device connected to the combustion chamber, a controller of the injection frequency, a conversion chamber within which sub-atmospheric pressure conditions are maintained and containing the combustion chamber, means for the conversion of radiant energy into electrical energy positioned on a planar surface of the conversion chamber that is perpendicular to the greater axis of the ellipsoid and passing through the centre of the ellipsoid.

Accordingly, even if Streetman's conversion chamber of spherical shape may have been incorporated in the Horne system, the present invention would not have resulted.

Withdrawal of the rejections advanced under 35 USC §103(a) is therefore in order.

3. Fee Authorization

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed

¹ The rejections of all other prior claims based on Horne alone or with other references have been mooted by the combination of claims 2-3 with claim 1 per the amendment instructions above.

REPETTO et al
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herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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